Technology

Overweight

Rationale for report: Sector Update

Analyst (s)

Paul Yap Ee Xing, CFA
paul.ee-xing@ambankgroup.com
+603 2036 2281

Building bridges

India's push for semiconductor self-sufficiency is creating a new growth avenue for Malaysia's semiconductor ecosystem. As India accelerates domestic chip investments, Malaysian companies can leverage their 50-year industry head start to capture this build-out. Kelington stands out as the clearest beneficiary, having been formally contracted by Tata Electronics for its flagship Dholera fab, providing direct proof that Malaysian semiconductor expertise is already embedded in India's supply chain.

- **India's self-sufficiency drive creates new growth avenue.** The India Semiconductor Mission (ISM) aims to establish a strong semiconductor ecosystem, with India expected to develop the capability to design and manufacture chips covering ~70–75% of domestic applications by 2029. The Indian semiconductor market, estimated at US$45–50bil in 2024–25, is projected to more than double to US$100–110bil by 2030. This ambition is reinforced by Semicon 2.0, approved in July 2026 with a ₹1.275tn (US$13.5bil) fiscal outlay spanning chip design, equipment and materials, fabs, OSAT, R&D and talent development.
- **Ambitions are translating into real capex.** India has approved 12 semiconductor manufacturing projects with cumulative committed investment of ₹1.64tn (US$17.4bil) across six states, with Gujarat emerging as the country's semiconductor hub. Tata, Micron and CG Power are among the largest projects, while OSAT accounts for a significant share of planned capacity, highlighting packaging as a key near-term bottleneck. Five facilities have already commenced or entered initial commercial production, marking the transition from construction to equipment installation and production ramp-up.
- **Malaysia-India integration is already underway.** Malaysia's semiconductor ecosystem spans OSAT (outsourced semiconductor assembly and test), testing equipment, automation, precision engineering and EMS (electronics manufacturing services), positioning its companies as natural partners to India's emerging supply chain. The India–Malaysia Country Roundtable at SEMICON India 2026, attended by ~150 industry leaders, further strengthened these links, while Kaynes' Sanand OSAT facility is leveraging technology from Malaysia's ISO Technology and CG Semi has sent engineers to Malaysia for OSAT training.
- **Capex translating into earnings visibility, with Kelington and Vitrox standing out.** Kelington has secured a US$452mil (RM1.8bil) turnkey award for a wafer fab facility in Gujarat, with India now accounting for >50% of its group order book in our estimate. Its Dholera contract further cements its role as a key facility engineering provider in India's semiconductor build-out. For Vitrox, India contributed ~5% of 2025 revenue, but sales have grown 10x since 2020, highlighting further earnings scalability as OSAT capacity ramps up. Other potential beneficiaries include Pentamaster, Greatech and QES.

Top picks

Sorted by upside

Kelington Group
BUY, TP: RM12.30 (+44%)
Market cap: RM7.5bil

Greatech
BUY, TP: RM3.60 (+36%)
Market cap: RM6.6bil

Pentamaster
HOLD, TP: RM4.85 (-11%)
Market cap: RM3.8bil

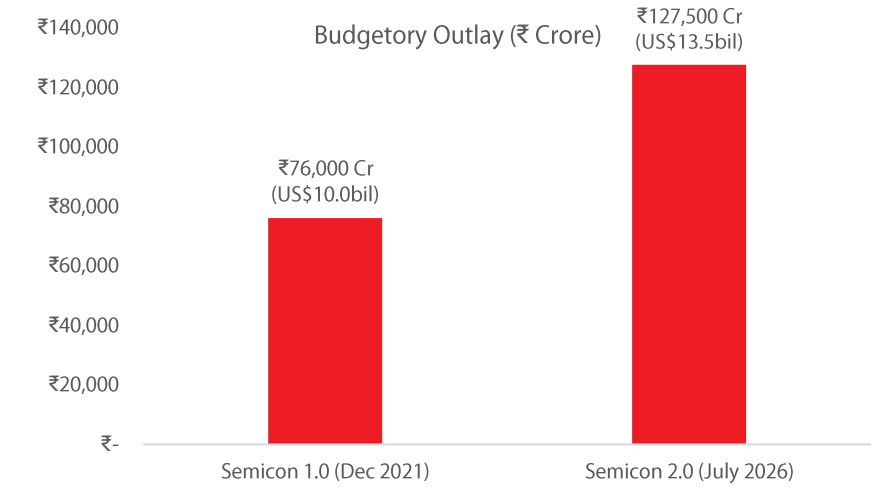
Building bridges

India's semiconductor capex pipeline is moving from policy to execution

India has one of the largest greenfield semiconductor buildouts

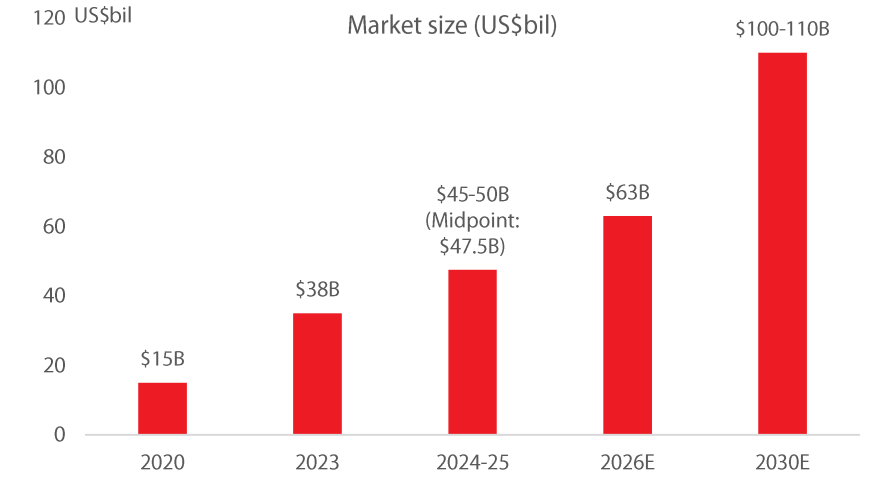
Under the India Semiconductor Mission (ISM), the initial Semicon 1.0 programme provided ₹76,000 crore (US$8bil) of fiscal support, while Semicon 2.0, approved in July 2026, adds a further ₹1.275tn (US$13.5bil) to support fabs, OSAT, equipment and materials, R&D and talent development. Total approved committed capex has reached ₹1.64tn (US$17.4bil) across 12 projects in six states, highlighting the rapid scaling of India's domestic semiconductor ecosystem.

EXHIBIT 1. Semicon 2.0 expands fiscal support by 68%



Source: India Semiconductor Mission

EXHIBIT 2. India's semiconductor market projected to surge 7x to US$110bil

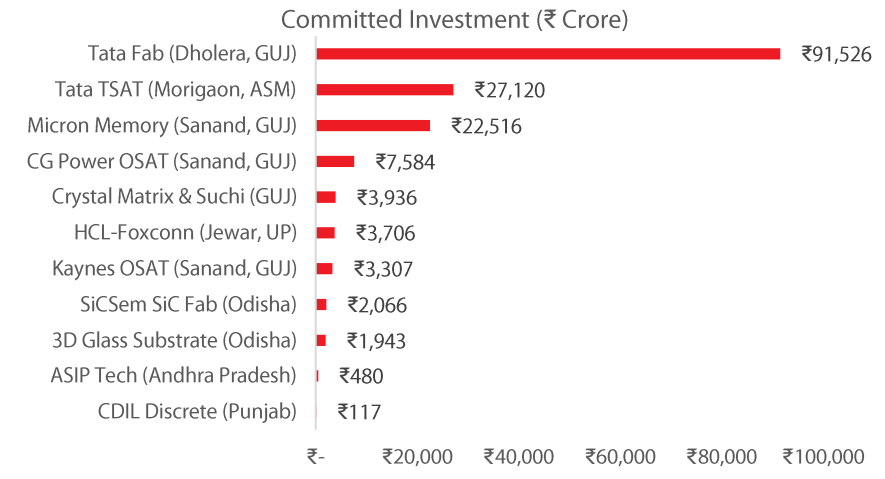


Source: Ministry of Electronics and IT

Gujarat has emerged as a primary semiconductor cluster

Gujarat hosts six of the 12 approved projects, including Tata Electronics' Dholera fab, Micron, CG Power, Kaynes Semicon, Suchi Semicon and Crystal Matrix. Tata is the dominant investor, accounting for ~70% of national capex through its ₹91,526 crore (US$9.7bil) Dholera fab and ₹27,120 crore (US$2.9bil) Assam advanced OSAT facility. The Dholera fab is being developed with PSMC and is designed for 50,000 wafer starts/month, while Tata TSAT's Assam facility targets 48mn chips/day.

EXHIBIT 3. Tata accounts for ~70% of India's approved semiconductor capex



Source: Press Information Bureau

Project mix is attractive for Malaysian companies given emphasis on back-end

Alongside Tata and Micron, projects from CG Power, Kaynes, Suchi and others are adding substantial OSAT capacity, creating opportunities not only for facility engineering during construction but also for equipment, automation and inspection suppliers as plants transition into commercial production.

OSAT is the near-term volume driver

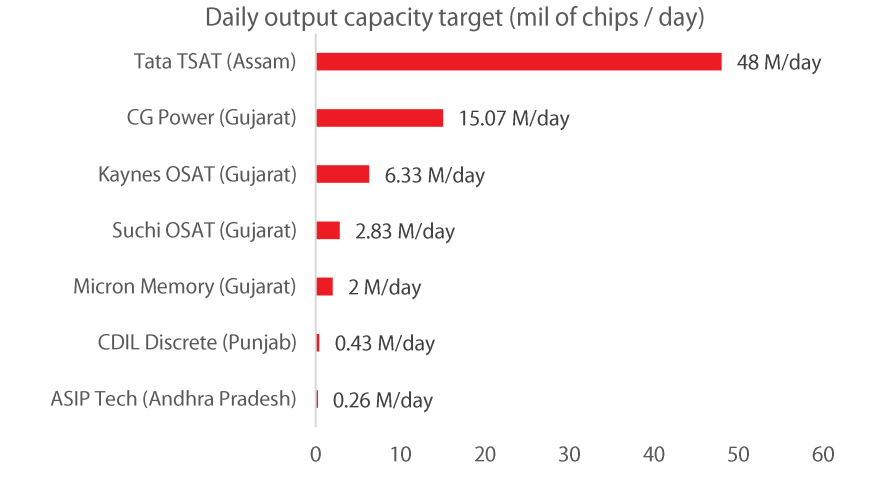
OSAT should be the first major earnings catalyst

Front-end fabs typically require 3–5 years for cleanroom construction, gas piping, tool installation and qualification, whereas OSAT facilities can be established within 12–18 months. This shorter cycle means packaging capacity is likely to ramp earlier and become the immediate volume driver for India's semiconductor supply chain

Scale of planned output is significant

At full commercial ramp, Tata TSAT targets 48mil chips/day, followed by CG Power at 15.07mil, Kaynes at 6.33mil, Suchi at 2.83mil and Micron at 2mil units/day, giving the approved facilities combined target capacity of >75mil chips/day. These facilities span automotive, EV, telecom, industrial, power electronics, mobile and consumer applications.

EXHIBIT 4. OSAT expansion drives massive daily chip testing and equipment demand



Source: Press Information Bureau

Transition into production already underway

Five facilities — Micron, Kaynes, CG Semi, CDIL and Suchi Semicon — have commenced or entered initial commercial production. CG Semi has also inaugurated its G1 pilot line for customer qualification batches. As these facilities progress from qualification to high-volume manufacturing, demand should shift towards AOI, wafer handlers and automated test equipment, providing a second wave of opportunities for Malaysian equipment makers.

Malaysia becoming extension of India's semiconductor system

India's constraint is lack of an established ecosystem

Malaysia's ~50-year semiconductor track record and ~13% share of global OSAT activity provide India with an immediately accessible pool of manufacturing know-how, engineering capabilities and supply-chain partners. Malaysia's ecosystem spans OSAT, automated test equipment, precision engineering, automation, materials handling and EMS, making it well positioned to support India's greenfield semiconductor build-out.

Malaysia-India integration is already occurring

Importantly, Malaysia–India integration is already occurring through tangible technology, talent and commercial linkages. Kaynes Technology's ₹3,307 crore (US$350mil) Sanand OSAT facility incorporates technology transferred from Malaysia's ISO Technology Sdn Bhd, including substrate packaging and wire-bond interconnect technologies. Separately, CG Semi sent its initial cohort of Indian engineers, operators and technicians to Malaysia for three months of hands-on OSAT training, helping establish the workforce required for commercial production.

Relationship being formalised at an industry level

SEMICON India 2026 hosted an India–Malaysia Country Roundtable, connecting Penang's equipment and precision-engineering vendors directly with Indian semiconductor developments. This creates a more direct channel for Malaysian companies to participate in India's capacity expansion rather than competing solely through global semiconductor equipment markets.

EXHIBIT 5. Malaysia-India semiconductor supply chain linkages

Indian Project / Entity	Malaysian Partner / Entity	Nature of Cooperation & Value Addition
Tata Electronics (Dholera Fab)	Kelington Engineering Pte Ltd	Strategic agreement for Ultra-High Purity (UHP) gas distribution systems, high-purity piping, and tool hook-up.
Kaynes Semicon (Sanand OSAT)	ISO Technology Sdn. Bhd.	Technology transfer partner for substrate packaging and wire-bond interconnect technologies.
CG Semi (Sanand OSAT)	Malaysian OSAT Training Facilities	Sent initial cohort of Indian engineers, operators, and technicians to Malaysia for 3 months of hands-on OSAT training
India Semiconductor Mission (ISM)	Malaysia Country Roundtable	Formal bilateral engagement platform organized at SEMICON India to connect Penang equipment/materials vendors with Indian sites

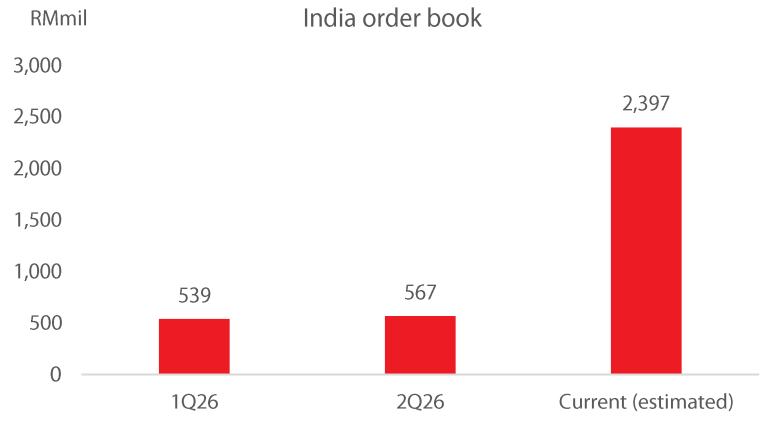
Source: Press Information Bureau

Malaysian listed beneficiaries

Direct fab exposure with India contributing over half of order book

Kelington (BUY, TP: RM12.30) is the clearest near-term beneficiary. Its core capabilities in UHP gas distribution, chemical piping, cleanroom process-tool hook-up and turnkey facility engineering directly address the infrastructure requirements of semiconductor fabs. Tata Electronics has formally contracted Kelington Engineering Pte Ltd for its Dholera fab, covering gas distribution systems, high-purity piping and tool hook-up. Together with its US$452mn (RM1.8bil) turnkey award, India now represents >50% of Kelington's group order book, making the country a primary earnings driver.

EXHIBIT 6. Kelington order book

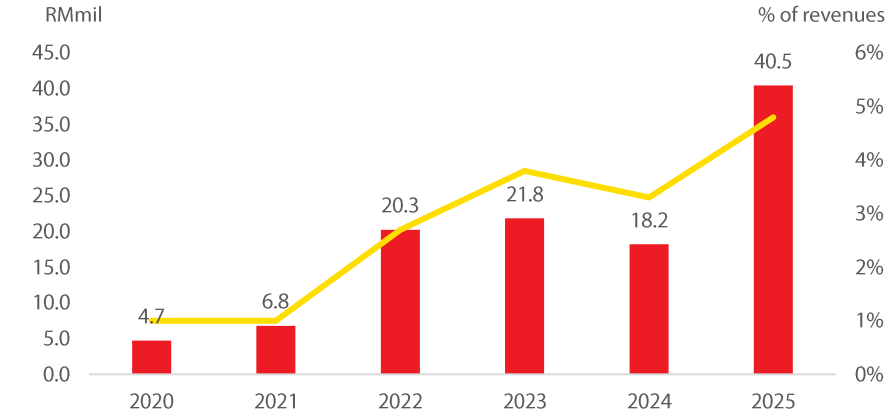


Source: Kelington

Poised to benefit as India's OSAT capacity moves into volume production

ViTrox offers the strongest second-order exposure to India's OSAT ramp-up. Its core capabilities in 3D AOI, automated board inspection and advanced wafer inspection should position it to benefit as Indian OSAT facilities move from pilot production into high-volume manufacturing. While India accounted for only ~5% of ViTrox's 2025 revenue, sales to Indian electronics and semiconductor customers have grown 10x since 2020. With India's approved OSAT facilities targeting >75mn chips/day at full ramp, we see significant room for further penetration.

EXHIBIT 7. Vitrox India revenue

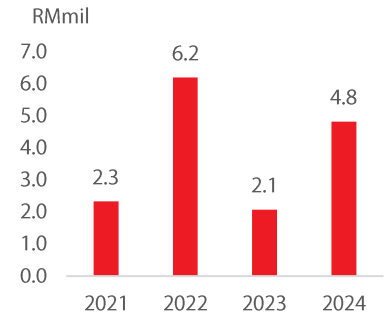


Source: Vitrox

Other potential beneficiaries

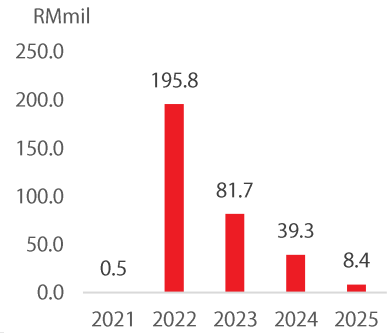
Pentamaster, QES and Greatech provide additional optionality. Their exposure is less directly contracted than Kelington's or as established as ViTrox's, but their capabilities in automated testing, inspection, material handling and precision automation align with the equipment requirements of India's emerging OSAT and semiconductor manufacturing base.

EXHIBIT 8. Pentamaster India revenue



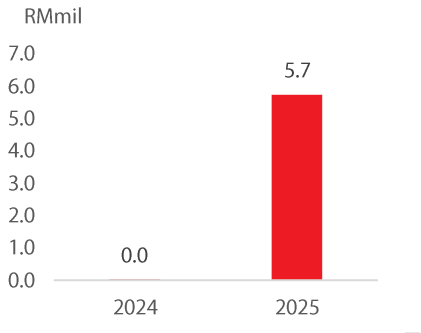
Source: Pentamaster

EXHIBIT 9. Greatech India revenue



Source: Greatech

EXHIBIT 10. QES India revenue



Source: QES

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